What is claimed is:

1. A micropattern measuring method, comprising:

acquiring an image of a micropattern including plural layers;

extracting a rough outline of the micropattern in the image as a sequence of points including plural points;

dividing the plural points composing the sequence of points into groups;

making each of the groups as each of patterns belong to any of the plural layers; and

acquiring edge coordinates of a pattern to be measured from the patterns which are made to belong to the respective layers.

2. The micropattern measuring method according to claim 1, wherein the step of dividing the plural points into groups comprises:

searching for points composing the rough outline in each of search directions with a representative point as a center and counting a distance from the representative point to each of detected points and the number of detected points in each of the search directions;

ranking sequences of points, based on the distance from the representative point to each of the points in respective searches;

dividing the respective sequences of points as subgroups based on the number of detected points and the ranking in the respective searches; and

connecting the subgroups to constitute one group when a distance between end points of the respective subgroups is a predetermined threshold value or less.

3. The micropattern measuring method according to claim 1, further comprising:

judging, according to a distance between sequences of points composing the rough outline, whether the sequences of points connect with each other, and creating a tree to show connectivity, before the step of dividing the plural points into groups.

4. The micropattern measuring method according to claim 1, wherein in the step of making each of the groups belong to any of the plural layers, when plural sequences of points composing closed paths exist, it is judged that a sequence of points of a closed path which is situated furthest outside is the pattern to be measured.

5. The micropattern measuring method according to claim 1, wherein in the step of making each of the groups belong to any of the plural layers, when plural sequences of points composing closed paths exist, Fourier descriptors for the respective closed paths are calculated, and the pattern to be measured is specified based on the calculated Fourier descriptors.

6. The micropattern measuring method according to claim 1, wherein in the step of making each of the groups belong to any of the plural layers, an association table in which each combination of patterns and connectivity of the sequence of peak points composing the rough outline are associated with each other is previously stored, and each pattern including a sequence of points is made to belong to any of the layers by checking the connectivity of the acquired sequence of points composing the rough outline based on the association table.

7. The micropattern measuring method according to claim 1, wherein in the step of making each of the groups belong to any of the plural layers, the pattern to be measured is extracted by classifying the sequence of points composing the rough outline into a straight line and the others by using Hough transformation.

8. The micropattern measuring method according to claim 1, wherein in the step of making each of the groups belong to any of the plural layers, with respect to the sequence of points

composing the rough outline, a convex hull containing all points of the sequence of points is calculated, and a sequence of points composing the convex hull is judged to be the pattern to be measured.

9. The micropattern measuring method according to claim 1, wherein centroid positions of patterns of the respective layers are calculated based on the edge coordinates acquired in the step of acquiring the edge coordinates, and misalignment between an upper layer and a lower layer is measured.

10. A micropattern measuring apparatus, comprising:

an image acquisition which acquires an image of a micropattern including plural layers;

a sequence-of-points extractor which extracts a rough outline of the micropattern in the image as a sequence of points including plural points;

a group divider which divides the plural points composing the sequence of points into groups;

a belonging section which makes each of the groups as each of patterns belong to any of the plural layers; and

an edge acquisition which acquires edge coordinates of a pattern to be measured from the patterns which are made to belong to the respective layers.

11. A computer-readable recording medium on which a micropattern measuring program is recorded, the micropattern measuring program comprising:

computer readable program code which acquires an image of a micropattern including plural layers;

computer readable program code which extracts a rough outline of the micropattern in the image as a sequence of points including plural points;

computer readable program code which divides the plural points composing the sequence of points into groups;

computer readable program code which makes each of the groups as each of patterns belong to any of the plural layers; and computer readable program code which acquires edge coordinates of a pattern to be measured from the patterns which are made to belong to the respective layers.